QUICK START GUIDE

PELCO

CCC5100H Series Camera

C2910M-C-QS (4/06)

This quick start guide describes how to install and configure the CCC5100H Series camera in most applications. It contains a representation of the setup menus to help you locate and change specific settings.

BEFORE YOU BEGIN

DOCUMENTATION

Refer to the enclosed CD for the following documentation:

- Installation/Operation manual: INSTALL.PDF
- Quick Start Guide: QSG.PDF
- Important Safety Instructions: SAFETY.PDF

MODELS

CCC5100H-6A 1/3-inch high resolution digital color camera, 12 VDC/24 VAC, CMY color filter array

AUTO IRIS LENS

Before using a DC-drive auto iris lens, you must adjust the DC offset setting (refer to *DC-Drive Auto Iris Lens Setup*).

HARDWARE

Refer to Figure 1 as you install the CCC5100H Series camera.

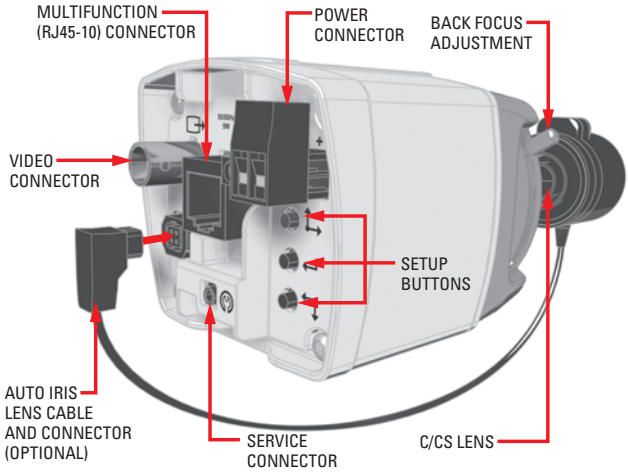


Figure 1. CCC5100H Connectors

LENS

The CCC5100H Series camera supports both manual and DC-drive auto iris lenses, either fixed focal length or varifocal. The camera accepts both CS- and C-mount lenses without an adapter.

To mount the lens onto the camera:

1. Use clean, compressed air to remove any dust or other foreign matter between the lens and the camera imager.
2. Screw the lens onto the lens mount.
3. **DC-drive auto iris lens:** Connect the four-pin connector from the lens to the connector on the back of the camera.

NOTE: Before using a DC-drive auto iris lens, you must adjust the DC offset setting (refer to *DC-Drive Auto Iris Lens Setup*).

MOUNT

The CCC5100H Series camera can be mounted from either the top or bottom. Use a mount or enclosure that includes a standard 1/4-20 screw with a maximum thread length of 0.375 inches (10 mm). If using the Pelco PCM150 camera mount, refer to the PCM150 Installation manual.

CONNECTIONS

The CCC5100H Series camera offers standard power and coax video connectors. To use the RJ45-10 multifunction connector that combines power, video, and control leads, refer to *Multifunction Connector* in the Installation/Operation manual.

LOW VOLTAGE POWER

Connect 12 VDC or 24 VAC power to the two-pin power connector on the back of the camera. Use a Class 2 isolated power source for the CCC5100H Series camera that can supply 12-36 VDC ±10% or 24-28 VAC ±10%, 47-63 Hz.

COAX VIDEO

Connect a video cable to the BNC connector on the back of the camera.

VIDEO FORMAT OVERRIDE

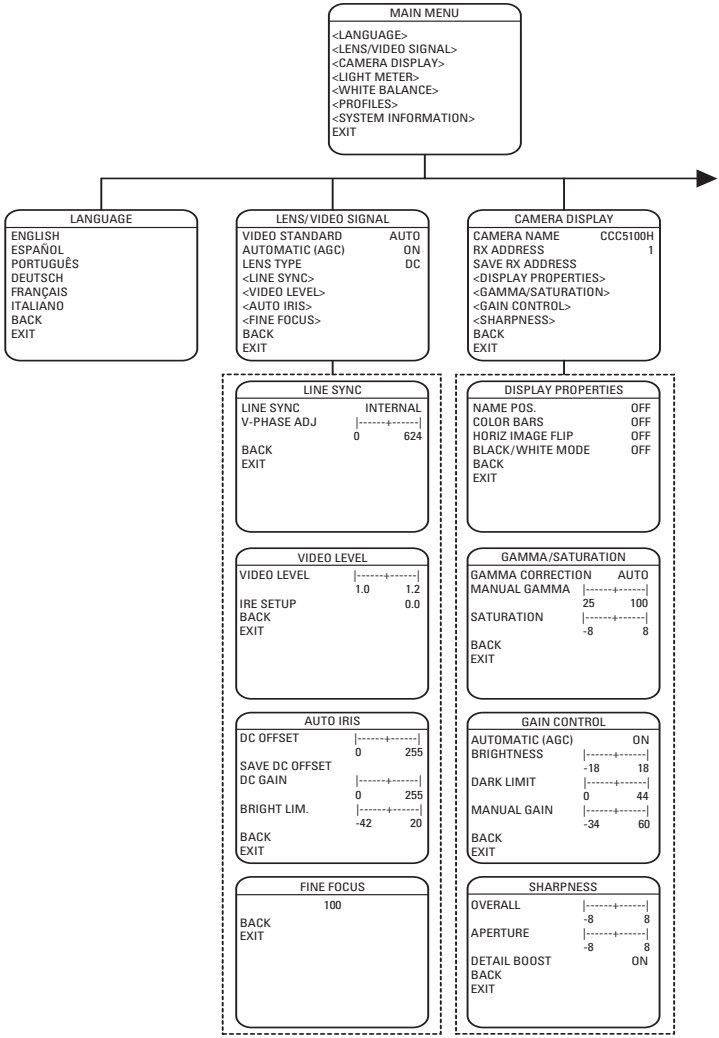
At power-up, the CCC5100H Series camera automatically selects the correct video format. To manually override the video format selection

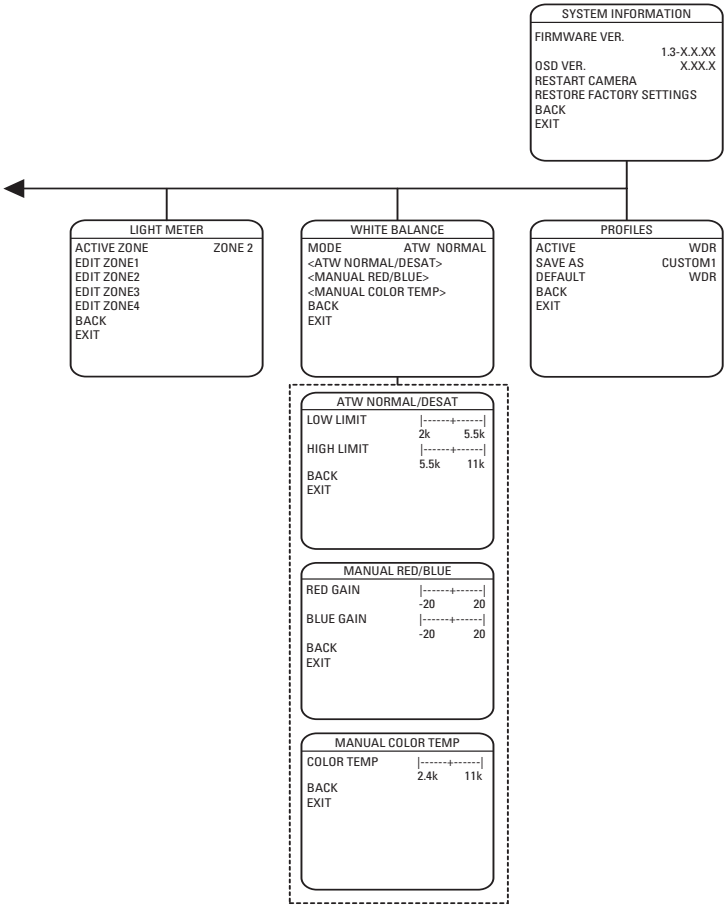
- press and hold the top and center buttons to select NTSC, or
- press and hold the center and bottom buttons to select PAL.

NOTE: If using DC power in a PAL installation without Pelco V-Sync, use the two-button override to select PAL. Otherwise, the camera will default to NTSC.

SETUP MENUS

Use the setup menus to customize the camera settings. Refer to the setup menus as shown on this and the opposite page:




SYSTEM INFORMATION
FIRMWARE VER.
1.3-X.X.XX
OSD VER. X.XX.X
RESTART CAMERA
RESTORE FACTORY SETTINGS
BACK
EXIT
LIGHT METER
ACTIVE ZONE ZONE 2
EDIT ZONE1
EDIT ZONE2
EDIT ZONE3
EDIT ZONE4
BACK
EXIT
WHITE BALANCE
MODE ATW NORMAL
<ATW NORMAL/DESAT>
<MANUAL RED/BLUE>
<MANUAL COLOR TEMP>
BACK
EXIT
PROFILES
ACTIVE WDR
SAVE AS CUSTOM1
DEFAULT WDR
BACK
EXIT
ATW NORMAL/DESAT
LOW LIMIT |------+------|
2k 5.5k
HIGH LIMIT |------+------|
5.5k 11k
BACK
EXIT
MANUAL RED/BLUE
RED GAIN |------+------|
-20 20
BLUE GAIN |------+------|
-20 20
BACK
EXIT
MANUAL COLOR TEMP
COLOR TEMP |------+------|
2.4k 11k
BACK
EXIT

ACCESSING THE SETUP MENUS

Use the top, center, and bottom buttons on the rear panel to access and navigate the setup menus. Table A lists the button presses for each menu action. A short press is less than one second; a long press is more than one second.

Throughout the rest of this guide, "press" means a short press; "press and hold" means a long press.

Table A. Rear Panel Buttons and Actions

MENU ACTION		BUTTON ACTION
Enter setup menus.		Short center press
Up or right in menu or item.	Single	Short top press
	Repeat	Long top press
Down or left in menu or item option.	Single	Short bottom press
	Repeat	Long bottom press
Select menu or item or advance to next step.		Short center press
Save setting and exit to menu.		Long center press

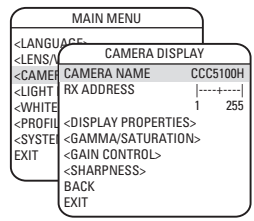
NOTE: As soon as all camera settings are configured, save them into a user-definable profile (CUSTOM1 or CUSTOM2). Then change the default to that profile (refer to *Camera Profile*).

CAMERA NAME

Enter the display name for this camera, one character at a time, up to 12 characters.

1. Display the CAMERA DISPLAY menu.
2. Select CAMERA NAME and press the center button. A cursor appears under the first character in the camera name.
3. Press the top or bottom button to scroll through the characters.

   Press the center button to select the displayed character. The cursor moves to the next character position.



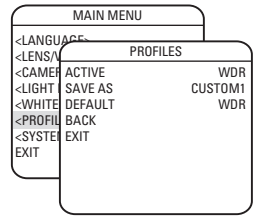
4. Press and hold the center button to exit the CAMERA NAME option.
5. Use BACK to return to the MAIN MENU.

CAMERA PROFILE

Select a basic camera profile and then customize it. After you save your custom camera settings into a user-definable profile, change the default to CUSTOM1 or CUSTOM2.

⚠ **CAUTION:** Be sure to save all camera settings into a user-definable profile so they will not be lost in case the camera loses power.

1. Display the PROFILES menu.
2. Select a profile for the camera:
   a. Select ACTIVE and press the center button.
   b. Press the top or bottom button to select a profile. Choose one of the following:
      - **WDR (Wide Dynamic Range):** For scenes that include very bright and very dark areas
      - **HI-DEF (High Definition):** For colorful scenes that require accurate color reproduction
      - **INDOOR:** For interior scenes with little or no exterior lighting
      - **OUTDOOR:** For exterior scenes with changing light levels
      - **WINDOW:** For scenes that combine exterior light (window) with interior light (for example, fluorescent)
      - **GAMING:** For scenes with mixed interior lighting that include self-illuminated devices
   c. Press the center button to activate the profile. The display blinks and the cursor exits to the menu. The camera activates the profile immediately.
3. Save your settings into a user-definable profile:
   a. Select SAVE AS and press the center button.
   b. Press the top or bottom button to select CUSTOM1 or CUSTOM2.
   c. Press the center button to store the custom settings. The display blinks and the cursor exits to the menu. The camera stores the custom settings and activates the custom profile immediately.



4. Select the user-definable profile to use during power-up:
    a. Select DEFAULT and press the center button.
    b. Press the top or bottom button to select your profile: CUSTOM1 or CUSTOM2.
    c. Press the center button to set the new default profile. The display blinks and the cursor exits to the menu. The camera sets the DEFAULT profile immediately.
5. Use BACK to return to the MAIN MENU.

DC-DRIVE AUTO IRIS LENS SETUP

Before using a DC-drive auto iris lens, you must adjust the DC offset setting.

Use the following steps to match the camera's DC voltage setting to the drive circuit on the auto iris lens:

1. Remove the lens from the camera.
2. Place the front end of the camera face down on a flat surface to block all light from the camera imager.
3. Connect the auto iris lens connector to the camera's rear panel.

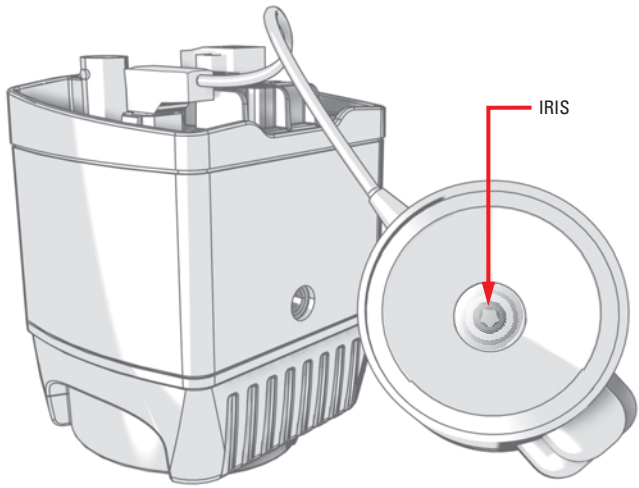
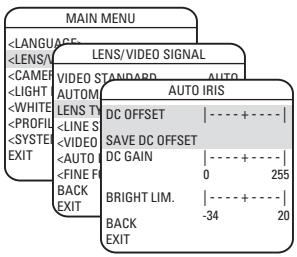


Figure 2. Prepare Camera and Lens

4. Connect a monitor to the BNC connector on the back of the camera.
5. Power up the camera.
6. Access the LENS/VIDEO SIGNAL menu (refer to *Setup Menus* and *Accessing the Setup Menus*).
7. Make sure the LENS TYPE is set to DC.
8. Access the AUTO IRIS menu.



9. Hold the auto iris lens so you can watch the iris (refer to Figure 3). Then increase the DC OFFSET setting slowly until the iris closes.

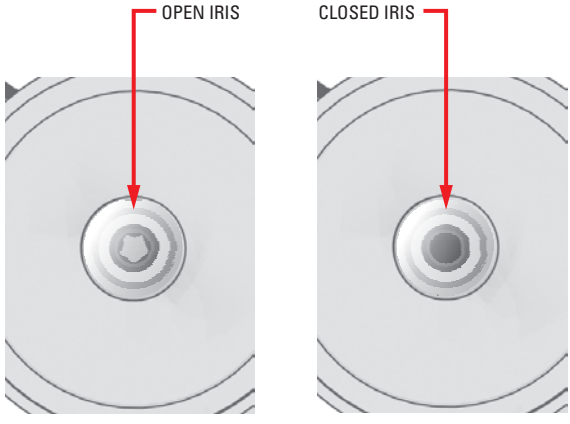


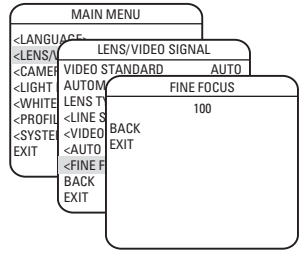
Figure 3. Open Iris and Closed Iris

10. As soon as the iris closes, slowly decrease the DC OFFSET value by 16, or until the iris opens again.
11. Select SAVE DC OFFSET to save the DC OFFSET setting into nonvolatile camera memory. It will not be erased, either by cycling camera power or by restoring factory settings.
12. Select EXIT to close the setup menus.
13. Power down the camera.
14. Remove the monitor cable from the camera's rear panel.
15. Remove the auto iris lens connector from the camera's rear panel.
16. Use clean, compressed air to remove any dust or other foreign matter between the lens and the camera imager.
17. Screw the auto iris lens onto the lens mount.
18. Connect the auto iris lens connector to the camera rear panel.

LENS FOCUS

Focus the camera lens.

1. **Auto iris only:** Cover the auto iris lens with a suitable neutral density (ND) filter to open the iris fully. For best results, use an ND3 filter.
2. **Manual iris only:** Open the iris completely.
3. If necessary, enable automatic gain control (AGC) on the LENS/VIDEO SIGNAL menu.



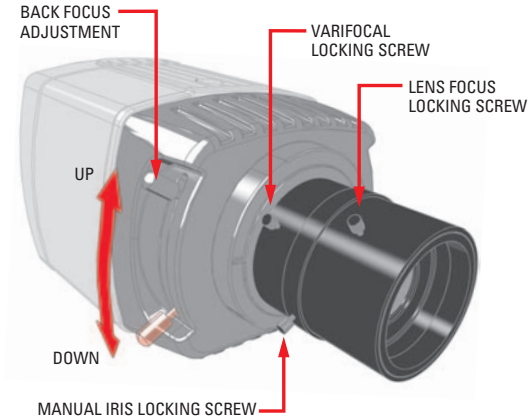


Figure 4. Lens Focus

4. Access the FINE FOCUS menu.
5. Aim the camera at the farthest object in the field of view. Make sure it is at least 6.5 ft (2 m) away.

6. **Fixed focal length lens only:**

   a. Set the lens focal length to far (∞).

   b. Adjust the back focus. Move the back focus locking screw on the camera up or down until the image is focused. As the focus improves, the value on the FINE FOCUS menu increases: the higher the number, the better the focus.

   c. Adjust the lens focus to achieve the best image. The better the focus, the higher the number on the FINE FOCUS menu.

7. **Varifocal lens only:**

   a. Set the varifocal to wide (W) and the lens focal length to far (∞).

   b. Adjust the back focus. Move the back focus locking screw on the camera up or down until the image is focused. As the focus improves, the value on the FINE FOCUS menu increases: the higher the number, the better the focus.

   c. Move the varifocal locking screw up or down to set the field of view.

   d. Adjust the lens focus until the highest value possible appears on the FINE FOCUS menu.

   e. Repeat steps c and d until the focus is correct.

8. **Manual iris only:** Adjust the iris for the best picture quality. The largest aperture gives the best light sensitivity; the smallest aperture gives the greatest depth of field.

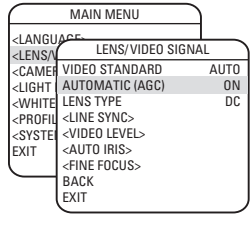
9. Tighten all lens adjustment screws.

10. **Auto iris only:** Remove the ND filter.

11. Select BACK to return to the LENS/VIDEO SIGNAL menu.

12. If necessary, disable AGC on the LENS/VIDEO SIGNAL menu.

13. Select EXIT to close the setup menus.



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This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local dealer for procedures for recycling this equipment.

Revision History

Manual No.	Date	Comments
C2910M-QS	9/04	Original version.
C2910M-A-QS	4/05	Updated for RGB filters, new firmware.
C2910M-B-QS	2/06	Removed the high voltage and RGB models. Updated the OSD version. Changed the active profile default. Added DC-drive auto iris setup procedure. Updated model numbers.
C2910M-C-QS	4/06	Updated the Auto Iris, Display Properties, and System Information screens.

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